What is claimed is:

1. A method of welding a plastic ferrule to an optical fiber comprising the steps of:

providing the combination of a plastic jacketed optical fiber and a plastic ferrule in such physical arrangement that an outer circumferential surface of the plastic fiber jacket is in juxtaposed relationship to an inner circumferential surface of the plastic ferrule;

providing a layer of material between and in contact with each of said juxtaposed jacket and ferrule which material is substantially more absorptive to radiation at a predetermined wavelength than the plastic materials of both the jacket and ferrule; and

irradiating the combination substantially at said predetermined wavelength to create a weld pool which includes said material and the adjacent materials of said jacket and ferrule.

2. The method of welding defined in claim 1 wherein the step of irradiating the combination creates a weld pool which includes said material and in substantially equal amounts and to substantially equal depths in the materials of said jacket and ferrule.

3. The method of welding defined in claim 1 wherein the material of the ferrule is selected so as to be substantially transparent to the irradiation of said predetermined wavelength.

4. In combination:

an optical fiber having a polymeric layer circumferentially disposed therearound; and

extending circumferentially around said polymeric circumferential layer, a second layer of transitory material which is substantially more absorptive to radiation of a predetermined wavelength than the material of said polymer layer.